Poster #1 – Hamlett

Poster Title: Comparison of Ionization Techniques: ESI, APPI and APCI for Malathion and Malathion O-analog and Malathion monocarboxylic acid.

## Brief Abstract:

Atmospheric Pressure Photo Ionization (APPI) and Atmospheric Pressure Chemical Ionization (APCI) are used to study compounds that are not readily ionized by Electrospray Ionization (ESI). APCI is a soft ionization technique used for non-polar or medium polarity compounds that are low in molecular weight and have some volatility. APPI is a soft ionization technique useful for non-polar compounds. APPI generates an ion when the molecule absorbs a photon from the light source. It is selective for analytes as the background gasses and solvents have an ionization potential greater than the photon energy. This presentation will demonstrate all three ionization techniques using Malathion, Malathion O-analog and Malathion monocarboxylic acid.

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